

Amendments to the Claims:

1. (Currently Amended) A system for ~~establishing an Internet Protocol (IP)~~
~~connection with a terminating node, the system comprising:~~
an originating node ~~capable of initiating~~ configured to initiate communication with the ~~a~~
terminating node; and
an intermediate node located between the originating node and the terminating node,
wherein the originating node is ~~capable of initiating~~ configured to initiate communication
with the terminating node in a manner based upon at least one parameter for communication with
at least one of the intermediate node ~~and/or~~ the terminating node, wherein the originating node is
~~capable of initiating~~ configured to initiate communication by ~~one of~~ requesting communication
with the terminating node via the intermediate node, ~~and/or~~ notifying the terminating node of
incoming data independent of the intermediate node, wherein ~~one of~~ the originating node ~~and/or~~
the intermediate node is ~~capable of notifying~~ configured to notify the terminating node of
incoming data when the originating node initiates communication by requesting communication
with the terminating node via the intermediate node, and wherein the terminating node, upon
being notified of incoming data, is ~~capable of registering~~ configured to register with the
intermediate node to thereby enable ~~IP-Internet Protocol (IP)~~ communication between the
originating node and the terminating node via the intermediate node.

2. (Currently Amended) A system according to Claim 1, wherein the originating
node is ~~capable of notifying~~ configured to notify the terminating node of incoming data further in
accordance with a non-IP-based communication technique when the originating node initiates
communication by notifying the terminating node of incoming data, and wherein ~~one of~~ the
originating node ~~and/or~~ the intermediate node is ~~capable of notifying~~ configured to notify the
terminating node of incoming data further in accordance with a non-IP-based communication
technique when the originating node initiates communication by requesting communication with
the terminating node via the intermediate node.

3. (Currently Amended) system according to Claim 2, wherein non-IP based communication comprises at least one of oral communication, text messaging, radio frequency (RF) communication, short messaging service (SMS) communication, multimedia messaging service (MMS) communication, and or instant messaging.

4. (Currently Amended) A system according to Claim 1, wherein the originating node is ~~capable of notifying~~ configured to notify the terminating node of incoming data further in accordance with at least one wireless communication technique when the originating node initiates communication by notifying the terminating node of incoming data, and wherein ~~one of the originating node and~~ or ~~the intermediate node is capable of notifying~~ configured to notify the terminating node of incoming data further in accordance with the at least one wireless communication technique when the originating node initiates communication by requesting communication with the terminating node via the intermediate node.

5. (Currently Amended) A system according to Claim 1, wherein the originating node is ~~capable of initiating~~ configured to initiate communication, and thereafter ~~communicating~~ communicate, with the terminating node in accordance with a plurality of different communication techniques.

6. (Currently Amended) A system according to Claim 1, wherein the originating node is ~~capable of requesting~~ configured to request communication with the terminating node via the intermediate node sending a domain name service (DNS) query to at least one of a plurality of DNS servers to thereby trigger the at least one of a plurality of DNS servers to communicate with the intermediate node to request communication with the terminating node.

7. (Currently Amended) A system according to Claim 6, wherein the originating node is ~~capable of sending~~ configured to send the DNS query to a first DNS server, wherein a second DNS server communicates with the intermediate node to request communication with the terminating node, and wherein the second DNS server comprises ~~one of the first DNS server and~~

or a DNS server different from the first DNS server.

8. (Currently Amended) A system according to Claim 1, wherein the intermediate node is ~~capable of establishing~~ configured to establish a tunnel with the terminating node in response to the terminating node registering with the intermediate node,

and wherein the originating node is ~~capable of communicating~~ configured to communicate with the terminating node at least partially via the tunnel.

9. (Currently Amended) A system according to Claim 8, wherein the intermediate node is ~~further capable of assigning~~ configured to assign a public IP address to the terminating node,

and wherein the originating node is ~~capable of communicating~~ configured to communicate with the terminating node by sending data based upon the public IP address of the terminating node assigned by the intermediate node.

10. (Currently Amended) A system according to Claim 8, wherein the intermediate node is ~~capable of establishing~~ configured to establish the tunnel based upon a registration message from the terminating node via at least one of a network address translator (NAT) ~~and or~~ a firewall (FW) located between the intermediate node and the terminating node,

and wherein the originating node is ~~capable of communicating~~ configured to communicate with the terminating node at least partially via the tunnel in a manner independent of the at least one of the NAT ~~and or~~ the FW.

11. (Currently Amended) A system according to Claim 1, wherein the terminating node is ~~capable of registering~~ configured to register with the intermediate node ~~such that to~~ thereby enable the intermediate node ~~creates to create a registration entry that includes a public IP address assigned to the terminating node,~~

and wherein the originating node is ~~capable of communicating~~ configured to communicate with the terminating node ~~such that to~~ thereby enable the intermediate node

~~operates to operate~~ as a proxy based upon the registration entry.

12. (Currently Amended) A system according to Claim 11, wherein the public IP address assigned to the terminating node comprises a public IP address assigned to the terminating node by a network address translator (NAT), wherein the intermediate node is ~~capable of receiving~~ configured to receive data from the originating node, and forwarding the data based upon the public IP address such that to thereby enable the NAT is ~~capable of transforming to transform~~ the public IP address assigned to the terminating node into a private IP address associated with the terminating node, and thereafter ~~forwarding forward~~ the data from the NAT to the terminating node based upon the private IP address of the terminating node.

13. (Currently Amended) A system according to Claim 1, wherein the originating node comprises ~~one of a mobile terminal and or a fixed terminal~~, and wherein ~~one of the mobile terminal and or fixed terminal~~ is ~~capable of notifying~~ configured to notify the terminating node of incoming data.

14. (Currently Amended) A system according to Claim 1, wherein ~~one of the originating node and or the intermediate node~~ comprises a Session Initiation Protocol (SIP) client, and wherein the SIP client is ~~capable of communicating~~ configured to communicate with a SIP proxy to thereby trigger the SIP proxy to notify the terminating node of incoming data.

15. (Currently Amended) A system according to Claim 1 further comprising:
at least one of a network address translator (NAT) and ~~or~~ a firewall (FW) located between the intermediate node and the terminating node,
wherein ~~one of the originating node and or the intermediate node~~ is ~~capable of communicating~~ configured to communicate with the at least one of the NAT and ~~or~~ FW to thereby trigger the at least one of the NAT and ~~or~~ FW to notify the terminating node of incoming data.

16. (Currently Amended) A system according to Claim 15, wherein ~~one of the~~ originating node ~~and or~~ the intermediate node is ~~capable of communicating configured to~~ communicate with the at least one of the NAT ~~and or~~ FW ~~such that to thereby enable the~~ at least one of the NAT ~~and or~~ FW ~~communicates to communicate~~ with a network gateway support node to thereby trigger the network gateway support node to notify the terminating node of incoming data.

17. (Currently Amended) A system according to Claim 1, wherein ~~one of the~~ originating node ~~and or~~ the intermediate node is ~~capable of communicating configured to~~ communicate with another network node to thereby trigger the other network node to notify the terminating node of incoming data.

18. (Currently Amended) A method ~~of establishing an Internet Protocol (IP)~~ connection with a terminating node, the method comprising:

receiving a notification of incoming data at ~~the a~~ terminating node from ~~one of an~~ originating node ~~and or~~ an intermediate node located between the originating node and the terminating node; and

registering the terminating node with the intermediate node in response to receiving the notification at the terminating node to thereby enable ~~IP-Internet Protocol (IP)~~ communication between the originating node and the terminating node via the intermediate node.

19. (Original) A method according to Claim 18, wherein notifying the terminating node comprises notifying the terminating node of incoming data further in accordance with a non-IP-based communication technique.

20. (Currently Amended) A method according to Claim 19, wherein notifying the terminating node comprises notifying the terminating node of incoming data further in accordance with at least one of oral communication, text messaging, radio frequency (RF)

communication, short messaging service (SMS) communication, multimedia messaging service (MMS) communication, and or instant messaging.

21. (Original) A method according to Claim 18, wherein notifying the terminating node comprises notifying the terminating node of incoming data further in accordance with at least one wireless communication technique.

22. (Original) A method according to Claim 18 further comprising:
communicating between the originating node and the terminating node, wherein notifying the terminating node and communicating between the originating node and terminating node occur in accordance with a plurality of different communication techniques.

23. (Currently Amended) A method according to Claim 18 further comprising:
requesting communication with the terminating node from the originating node via the intermediate node by sending a domain name service (DNS) query to at least one of a plurality of DNS servers to thereby trigger the at least one of a plurality of DNS servers to communicate with the intermediate node such that to thereby enable the intermediate node ~~notifies to notify~~ the terminating node of incoming data.

24. (Currently Amended) A method according to Claim 23, wherein requesting communication comprises requesting communication with the terminating node from the originating node via the intermediate node by sending a DNS query to a first DNS server to thereby trigger a second DNS server to communicate with the intermediate node such that to thereby enable the intermediate node ~~notifies to notify~~ the terminating node of incoming data, and wherein the second DNS server comprises ~~one of~~ the first DNS server and or a DNS server different from the first DNS server.

25. (Original) A method according to Claim 18 further comprising:
establishing a tunnel between the intermediate node and the terminating node in response

to registering the terminating node with the intermediate node; and
communicating between the originating node and the terminating node at least partially
via the tunnel.

26. (Original) A method according to Claim 25, wherein registering the terminating node includes assigning a public IP address to the terminating node, and wherein communicating comprises sending data from the originating node to the terminating node based upon the public IP address assigned to the terminating node.

27. (Currently Amended) A method according to Claim 25, wherein establishing a tunnel comprises establishing a tunnel based upon a registration message from the terminating node via at least one of a network address translator (NAT) ~~and~~ or a firewall (FW) located between the intermediate node and the terminating node,
and wherein communicating comprises communicating between the originating node and the terminating node at least partially via the tunnel in a manner independent of the at least one of the NAT ~~and~~ or the FW.

28. (Currently Amended) A method according to Claim 18, wherein registering the terminating node comprises registering the terminating node ~~such that to thereby enable the intermediate node creates to create~~ a registration entry that includes a public IP address assigned to the terminating node, and wherein the method further comprises:

communicating between the originating node and the terminating node via the intermediate node ~~such that to thereby enable the intermediate node operates to operate~~ as a proxy based upon the registration entry.

29. (Currently Amended) A method according to Claim 28, wherein the public IP address assigned to the terminating node comprises a public IP address assigned to the terminating node by a network address translator (NAT), and wherein communicating comprises:
receiving data from the originating node at the intermediate node; and

forwarding the data based upon the public IP address such that to thereby enable the NAT is capable of transforming to transform the public IP address assigned to the terminating node into a private IP address associated with the terminating node, and thereafter forwarding the data from the NAT to the terminating node based upon the private IP address of the terminating node.

30. (Currently Amended) A method according to Claim 18, wherein the originating node comprises one of a mobile terminal and or a fixed terminal, and wherein receiving a notification comprises receiving a notification from one of the mobile terminal and or fixed terminal.

31. (Currently Amended) A method according to Claim 18, wherein one of the originating node and or the intermediate node comprises a Session Initiation Protocol (SIP) client, and wherein receiving a notification comprises receiving a notification from a SIP proxy in response to the SIP proxy being triggered by the SIP client to notify the terminating node of incoming data.

32. (Currently Amended) A method according to Claim 18, wherein receiving a notification comprises receiving a notification from at least one of a network address translator (NAT) and or a firewall (FW) located between the intermediate node and the terminating node, and wherein receiving a notification comprises receiving a notification in response to the at least one of the NAT and or FW being triggered by one of the originating node and or the intermediate node to notify the terminating node of incoming data.

33. (Currently Amended) A method according to Claim 32, wherein receiving a notification comprises receiving a notification from a network gateway support node in response to the network gateway support node being triggered by at least one of the NAT and or FW to notify the terminating node of incoming data.

34. (Currently Amended) A method according to Claim 18, wherein receiving a notification comprises receiving a notification from another network node in response to the other network node being triggered by ~~one of the~~ originating node ~~and or~~ the intermediate node to notify the terminating node of incoming data.

35. (Currently Amended) ~~A terminal~~ An apparatus comprising:
a controller ~~capable of receiving configured to receive~~ a notification of incoming data from ~~one of an~~ originating node ~~and or~~ an intermediate node located between the originating node and the ~~terminal apparatus~~, wherein the controller is also ~~capable of registering configured to register~~ the ~~terminal apparatus~~ with the intermediate node in response to receiving the notification to thereby enable IP-Internet Protocol (IP) communication between the originating node and the ~~terminal apparatus~~ via the intermediate node.

36. (Currently Amended) ~~A terminal~~ An apparatus according to Claim 35, wherein the controller is ~~capable of receiving configured to receive~~ the notification further in accordance with a non-IP-based communication technique.

37. (Currently Amended) ~~A terminal~~ An apparatus according to Claim 36, wherein the controller is ~~capable of receiving configured to receive~~ the notification further in accordance with at least one of text messaging, radio frequency (RF) communication, short messaging service (SMS) communication, multimedia messaging service (MMS) communication, ~~and or~~ instant messaging.

38. (Currently Amended) ~~A terminal~~ An apparatus according to Claim 35, wherein the controller is ~~capable of receiving configured to receive~~ the notification further in accordance with at least one wireless communication technique.

39. (Currently Amended) ~~A terminal~~ An apparatus according to Claim 35, wherein the controller is further ~~capable of communicating configured to communicate~~ with the

originating node, and wherein the controller is ~~capable of receiving~~ configured to receive the notification and ~~communicating~~ communicate with the originating node in accordance with a plurality of different communication techniques.

40. (Currently Amended) ~~A terminal~~ An apparatus according to Claim 35, wherein the controller is ~~capable of receiving~~ configured to receive the notification in response to the originating node requesting communication with the ~~terminal apparatus~~ via the intermediate node by sending a domain name service (DNS) query to at least one of a plurality of DNS servers to thereby trigger the at least one of a plurality of DNS servers to communicate with the intermediate node ~~such that to thereby enable~~ the intermediate node ~~sends to send~~ the notification to the ~~terminal apparatus~~.

41. (Currently Amended) ~~A terminal~~ An apparatus according to Claim 40, wherein the controller is ~~capable of receiving~~ configured to receive the notification in response to the originating node requesting communication comprises requesting communication with the terminating node via the intermediate node by sending the DNS query to a first DNS server to thereby trigger a second DNS server to communicate with the intermediate node ~~such that to thereby enable~~ the intermediate node ~~notifies to notify~~ the terminating node of incoming data, and wherein the second DNS server comprises ~~one of the first DNS server and or~~ a DNS server different from the first DNS server.

42. (Currently Amended) ~~A terminal~~ An apparatus according to Claim 35, wherein the controller is ~~capable of registering~~ configured to register the ~~terminal such that apparatus to~~ thereby enable the intermediate node ~~establishes to establish~~ a tunnel between the intermediate node and the ~~terminal apparatus~~ in response to registering the ~~terminal apparatus~~ with the intermediate node, and wherein the controller is ~~capable of communicating~~ configured to communicate with the originating node at least partially via the tunnel.

43. (Currently Amended) ~~A terminal~~ An apparatus according to Claim 42, wherein

the controller is ~~capable of registering~~ configured to register the terminal ~~such that apparatus to thereby enable~~ the intermediate node ~~assigns to assign~~ a public IP address to the terminal ~~apparatus~~, and wherein the controller is ~~capable of receiving~~ configured to receive data sent from the originating node to the ~~terminal apparatus~~ based upon the public IP address assigned to the ~~terminal apparatus~~.

44. (Currently Amended) ~~A terminal~~ An apparatus according to Claim 42, wherein the controller is ~~capable of sending~~ configured to send a registration message to the intermediate node via at least one of a network address translator (NAT) ~~and or~~ a firewall (FW) located between the intermediate node and the ~~terminal apparatus~~ to thereby register the ~~terminal apparatus~~, and wherein the controller is ~~capable of communicating~~ configured to communicate with the originating node at least partially via the tunnel in a manner independent of the at least one of the NAT ~~and or~~ the FW.

45. (Currently Amended) ~~A terminal~~ An apparatus according to Claim 35, wherein the controller is ~~capable of registering~~ configured to register the terminal ~~such that apparatus to thereby enable~~ the intermediate node ~~creates to create~~ a registration entry that includes a public IP address assigned to the ~~terminal apparatus~~, and wherein the controller is ~~capable of communicating~~ configured to communicate with the originating node via the intermediate node ~~such that to thereby enable~~ the intermediate node ~~operates to operate~~ as a proxy based upon the registration entry.

46. (Currently Amended) ~~A terminal~~ An apparatus according to Claim 45, wherein the public IP address assigned to the ~~terminal apparatus~~ comprises a public IP address assigned to the ~~terminal apparatus~~ by a network address translator (NAT), and wherein the controller is ~~capable of communicating~~ configured to communicate with the originating node ~~such that to thereby enable~~ the intermediate node ~~receives to receive~~ data from the originating node, and ~~forwards forward~~ the data based upon the public IP address ~~such that to thereby enable~~ the NAT is ~~capable of transforming~~ to transform the public IP address assigned to the ~~terminal apparatus~~

into a private IP address associated with the ~~terminal~~ apparatus, and thereafter forwarding forward the data from the NAT to the controller based upon the private IP address of the ~~terminal~~ apparatus.

47. (Currently Amended) ~~A terminal~~ An apparatus according to Claim 35, wherein the originating node comprises ~~one of a mobile terminal and apparatus or a fixed terminal apparatus~~, and wherein the controller is ~~capable of receiving~~ configured to receive the notification from ~~one of the mobile terminal and apparatus or fixed terminal apparatus~~.

48. (Currently Amended) ~~A terminal~~ An apparatus according to Claim 35, wherein ~~one of the~~ originating node ~~and or~~ the intermediate node comprises a Session Initiation Protocol (SIP) client, and wherein the controller is ~~capable of receiving~~ configured to receive the notification from a SIP proxy in response to the SIP proxy being triggered by the SIP client to notify the ~~terminal~~ apparatus of incoming data.

49. (Currently Amended) ~~A terminal~~ An apparatus according to Claim 35, wherein the controller is ~~capable of receiving~~ configured to receive the notification from at least one of a network address translator (NAT) ~~and or~~ a firewall (FW) located between the intermediate node and the ~~terminal~~ apparatus, and wherein the controller is ~~capable of receiving~~ configured to receive the notification in response to the at least one of the NAT ~~and or~~ FW being triggered by ~~one of the~~ originating node ~~and or~~ the intermediate node to notify the ~~terminal~~ apparatus of incoming data.

50. (Currently Amended) ~~A terminal~~ An apparatus according to Claim 49, wherein the controller is ~~capable of receiving~~ configured to receive the notification from a network gateway support node in response to the network gateway support node being triggered by at least one of the NAT ~~and or~~ FW to notify the ~~terminal~~ apparatus of incoming data.

51. (Currently Amended) ~~A terminal~~ An apparatus according to Claim 35, wherein the controller is ~~capable of receiving~~ configured to receive the notification from another network node in response to the other network node being triggered by ~~one of the originating node and~~ or the intermediate node to notify the ~~terminal~~ apparatus of incoming data.

52. (Currently Amended) A system ~~for establishing an Internet Protocol (IP) connection~~ comprising:
a network address translator (NAT) located between an originating node and a terminating node, wherein the NAT is ~~capable of receiving~~ configured to receive a communication request from a network node, and in response to the connection request, ~~notifying~~ notify the terminating node of incoming data ~~such that to thereby enable the terminating node registers to register~~ with an intermediate node located between the originating node and the NAT to thereby enable IP Internet Protocol (IP) communication between the originating node and the terminating node via the intermediate node.

53. (Currently Amended) A system according to Claim 52, wherein the NAT is ~~capable of notifying~~ configured to notify the terminating node via a network gateway support node of a network including the terminating node.

54. (Currently Amended) A system according to Claim 52, wherein the NAT is ~~capable of receiving~~ configured to receive the communication request from ~~one of the originating node and~~ or the intermediate node.

55. (Currently Amended) A system according to Claim 52 further comprising:
an intermediate node ~~capable of establishing~~ configured to establish a tunnel with the terminating node in response to the terminating node registering with the intermediate node ~~such that to thereby enable the originating node is capable of communicating to communicate~~ with the terminating node at least partially via the tunnel.

56. (Currently Amended) A system according to Claim 55, wherein the intermediate node is further ~~capable of assigning~~ configured to assign a public IP address to the terminating node ~~such that to thereby enable~~ the originating node is ~~capable of communicating to~~ communicate with the terminating node by sending data based upon the public IP address of the terminating node assigned by the intermediate node.

57. (Currently Amended) A system according to Claim 55, wherein the intermediate node is ~~capable of establishing~~ configured to establish the tunnel based upon a registration message from the terminating node via the NAT, and wherein the intermediate node is ~~capable of establishing~~ configured to establish a tunnel with the terminating node to permit the originating node to communicate with the terminating node at least partially via the tunnel in a manner independent of the NAT.

58. (Currently Amended) A system according to Claim 54 further comprising:
an intermediate node ~~capable of receiving~~ configured to receive a registration message from the terminating node, and thereafter ~~creating~~ create a registration entry that includes a public IP address assigned to the terminating node, ~~wherein originating node is capable of communicating with the terminating node such that,~~ and wherein the intermediate node is ~~capable of operating~~ configured to operate as a proxy during communication between the originating node and the terminating node based upon the registration entry.

59. (Currently Amended) ~~A terminating node~~ An apparatus comprising;
a receiving means for receiving a notification of incoming data from ~~one of an originating node and or an intermediate node located between the originating node and the terminating node~~ apparatus; and
a registering means for registering the ~~terminating node~~ apparatus with the intermediate node in response to the receiving means receiving the notification to thereby enable Internet Protocol (IP) communication between the originating node and the ~~terminating node~~ apparatus via the intermediate node.